GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: September 5, 2002, 13:01:12 ; Search time 94.24 Seconds
(without alignments)
2687.268 Million cell updates/sec

Title: US-09-665-728-2
Perfect score: 1031
Sequence: 1 tctagcgaacccttcggcc.....agcccggctcgagcggccgc 1031

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
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6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50.4	4.9	2338	1	US-08-425-069-1	Sequence 1, Appli
	2	50.4	4.9	2338	2	US-08-317-844B-1	Sequence 1, Appli
	3	41.2	4.0	1185	3	US-09-023-339-3	Sequence 3, Appli
	4	41.2	4.0	1260	3	US-09-023-173-5	Sequence 5, Appli
	5	41.2	4.0	1308	3	US-09-023-173-10	Sequence 10, Appl
	6	41.2	4.0	1308	3	US-09-023-339-6	Sequence 6, Appli
	7	40.2	3.9	2214	3	US-08-864-038A-1	Sequence 1, Appli
	8	40.2	3.9	3331	3	US-08-864-038A-2	Sequence 2, Appli
	9	40.2	3.9	3331	3	US-08-864-038A-4	Sequence 4, Appli
	10	39.6	3.8	2502	1	US-08-073-384C-7	Sequence 7, Appli
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	17	39.6	3.8	2502	2	US-08-599-491-7	Sequence 7, Appli
	18	39.6	3.8	2502	2	US-08-756-386-7	Sequence 7, Appli
	19	39.6	3.8	2502	2	US-08-823-516-7	Sequence 7, Appli
	20	39.6	3.8	2502	3	US-08-682-853A-7	Sequence 7, Appli
	21	39.6	3.8	2502	3	US-08-759-038-7	Sequence 7, Appli
	22	39.6	3.8	2502	3	US-08-758-314-7	Sequence 7, Appli
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	25	38.6	3.7	1598	1	US-08-211-682-24	Sequence 24, Appl
	26	38.4	3.7	2461	1	US-08-282-141-1	Sequence 1, Appli
	27	38.2	3.7	1995	1	US-08-425-069-3	Sequence 3, Appli
	28	38.2	3.7	1995	2	US-08-317-844B-3	Sequence 3, Appli
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	31	37.2	3.6	2260	2	US-08-788-750-1	Sequence 1, Appli
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ALIGNMENTS

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RESULT 1
US-08-425-069-1
; Sequence 1, Application US/08425069
; Patent No. 5728810
; GENERAL INFORMATION:
;   APPLICANT: Lewis, Randolph V.
;   APPLICANT: Xu, Ming
;   APPLICANT: Hinman, Michael B.
;   TITLE OF INVENTION: ISOLATED DNA CODING FOR SPIDER SILK
;   TITLE OF INVENTION: PROTEIN, A REPLICABLE VECTOR AND A TRANSFORMED CELL
;   TITLE OF INVENTION: CONTAINING THE ISOLATED DNA, AND PRODUCTS THEREOF
;   NUMBER OF SEQUENCES: 69
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Birch, Stewart, Kolasch & Birch
;     STREET: 301 No. 5728810th Washington Street
;     CITY: Falls Church
;     STATE: Virginia
;     COUNTRY: U.S.A.
;     ZIP: 22046
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/425,069
;     FILING DATE: 19-APR-1995
;     CLASSIFICATION: 435
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Murphy Jr., Gerald M
;     REGISTRATION NUMBER: 28,977
;     REFERENCE/DOCKET NUMBER: 1447-106P
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (703) 205-8000
;     TELEFAX: (703) 205-8050
;     TELEX:
; INFORMATION FOR SEQ ID NO: 1:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 2338 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   HYPOTHETICAL: NO
;   ORIGINAL SOURCE:
;     ORGANISM: Nephilia clavipes
;   FEATURE:
;     NAME/KEY: CDS
;     LOCATION: 1..2154
;     OTHER INFORMATION: /product= "Nephila clavipes
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;      OTHER INFORMATION:  dragline silk protein"
;    PUBLICATION INFORMATION:
;      AUTHORS:  Xu, Ming
;      AUTHORS:  Lewis, Randolph V.
;      TITLE:  Structure of a protein superfiber:  Spider
;      TITLE:  drafline silk
;      JOURNAL:  Proc. Natl. Acad. Sci. U.S.A.
;      VOLUME:  87
;      PAGES:  7120-7124
;      DATE:  Sept.-1990
;      RELEVANT RESIDUES IN SEQ ID NO:  1: FROM 1 TO 2338
US-08-425-069-1


  Query Match             4.9%;  Score 50.4;  DB 1;  Length 2338;
  Best Local Similarity   49.3%;  Pred. No. 0.0054;
  Matches  132;  Conservative    0;  Mismatches  136;  Indels    0;  Gaps    0;

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Db     459 TCTTGGAAGCCAAGGTGCAGGACGAGGTGGATTAGGTGGACAAGGTGCAGGTGCAGCAGC 518

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Qy     694 agcagcaggtgtcggaggtgttaaagtgggtggagtccgccatccaggcctccaaagttc 753
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RESULT   2
US-08-317-844B-1
; Sequence 1, Application US/08317844B
; Patent No. 5989894
;  GENERAL INFORMATION:
;    APPLICANT:  Lewis, Randolph V.
;    APPLICANT:  Xu, Ming
;    APPLICANT:  Hinman, Michael B.
;    TITLE OF INVENTION:  ISOLATED DNA CODING FOR SPIDER SILK
;    TITLE OF INVENTION:  PROTEIN, A REPLICABLE VECTOR AND A TRANSFORMED CELL
;    TITLE OF INVENTION:  CONTAINING THE ISOLATED DNA, AND PRODUCTS THEREOF
;    NUMBER OF SEQUENCES:  62
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Birch, Stewart, Kolasch & Birch
;      STREET:  301 No. 5989894th Washington Street
;      CITY:  Falls Church
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22046
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/317,844B
;      FILING DATE:  04-OCT-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Murphy Jr., Gerald M
;      REGISTRATION NUMBER:  28,977
;      REFERENCE/DOCKET NUMBER:  1447-105P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 241-1300
;      TELEFAX:  (703) 241-2848
;      TELEX:  248345
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2338 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Nephilia clavipes
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..2154
;      OTHER INFORMATION:  /product= "Nephila clavipes
;      OTHER INFORMATION:  dragline silk protein"
;    PUBLICATION INFORMATION:
;      AUTHORS:  Xu, Ming
;      AUTHORS:  Lewis, Randolph V.
;      TITLE:  Structure of a protein superfiber:  Spider
;      TITLE:  drafline silk
;      JOURNAL:  Proc. Natl. Acad. Sci. U.S.A.
;      VOLUME:  87
;      PAGES:  7120-7124
;      DATE:  Sept.-1990
;      RELEVANT RESIDUES IN SEQ ID NO:  1: FROM 1 TO 2338
US-08-317-844B-1


  Query Match             4.9%;  Score 50.4;  DB 2;  Length 2338;
  Best Local Similarity   49.3%;  Pred. No. 0.0054;
  Matches  132;  Conservative    0;  Mismatches  136;  Indels    0;  Gaps    0;

Qy     514 tctcggatgcccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagc 573
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Db     459 TCTTGGAAGCCAAGGTGCAGGACGAGGTGGATTAGGTGGACAAGGTGCAGGTGCAGCAGC 518

Qy     574 tgaagcagtcgcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctg 633
           | ||||| || ||||| |   |  |  |  |  ||    |   |    ||     || |
Db     519 AGCAGCAGCCGGAGGTGCTGGACAAGGCGGATACGGTGGTCTTGGTGGACAAGGTGCCGG 578

Qy     634 gctacctggcttttgaggagatcgcctccaccagttctggccaagtgttccagctggaca 693
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Qy     694 agcagcaggtgtcggaggtgttaaagtgggtggagtccgccatccaggcctccaaagttc 753
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RESULT   3
US-09-023-339-3
; Sequence 3, Application US/09023339
; Patent No. 6127145
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of '1-Antitrypsin
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  P.O. Box 60850
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
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;       MEDIUM TYPE:  Diskette
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  DOS
;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/023,339
;       FILING DATE:  13-FEB-1998
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  60/037,991
;       FILING DATE:  13-FEB-1997
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Petithory, Joanne R
;       REGISTRATION NUMBER:  P42,995
;       REFERENCE/DOCKET NUMBER:  0665-0003.30
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650-324-0880
;       TELEFAX:  650-324-0960
;   INFORMATION FOR SEQ ID NO:  3:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1185 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     IMMEDIATE SOURCE:
;       CLONE:  codon-optimized AAT coding sequence
US-09-023-339-3


  Query Match             4.0%;  Score 41.2;  DB 3;  Length 1185;
  Best Local Similarity   47.6%;  Pred. No. 0.61;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

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; Sequence 5, Application US/09023173
; Patent No. 6066781
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of Mature Proteins
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Ave., Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/023,173
;      FILING DATE:  13-FEB-1998
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/038,168
;      FILING DATE:  13-FEB-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Petithory, Joanne R
;      REGISTRATION NUMBER:  P42995
;      REFERENCE/DOCKET NUMBER:  0665-0007.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-324-0880
;      TELEFAX:  650-324-0960
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1260 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      CLONE:  codon-optimized RAmy3D signal-mature AAT
US-09-023-173-5


  Query Match             4.0%;  Score 41.2;  DB 3;  Length 1260;
  Best Local Similarity   47.6%;  Pred. No. 0.62;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

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Qy    524 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 583
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Db    819 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 878

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Db    879 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 938

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; Sequence 10, Application US/09023173
; Patent No. 6066781
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of Mature Proteins
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Ave., Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
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;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/023,173
;       FILING DATE:  13-FEB-1998
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  60/038,168
;       FILING DATE:  13-FEB-1997
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Petithory, Joanne R
;       REGISTRATION NUMBER:  P42995
;       REFERENCE/DOCKET NUMBER:  0665-0007.30
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650-324-0880
;       TELEFAX:  650-324-0960
;   INFORMATION FOR SEQ ID NO:  10:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1308 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-09-023-173-10


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  Best Local Similarity   47.6%;  Pred. No. 0.63;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

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Qy    524 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 583
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Db    860 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 919

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Db    920 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 979

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Db    980 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 1039

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Db   1040 CACGAAGGTCTTCA 1053


RESULT   6
US-09-023-339-6
; Sequence 6, Application US/09023339
; Patent No. 6127145
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of '1-Antitrypsin
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  P.O. Box 60850
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/023,339
;      FILING DATE:  13-FEB-1998
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/037,991
;      FILING DATE:  13-FEB-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Petithory, Joanne R
;      REGISTRATION NUMBER:  P42,995
;      REFERENCE/DOCKET NUMBER:  0665-0003.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-324-0880
;      TELEFAX:  650-324-0960
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1308 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      CLONE:  codon-optimized No. 6127145I/XhoI fragment encoding RAmy3D
;      CLONE:  signal peptide-AAT fusion protein
US-09-023-339-6


  Query Match             4.0%;  Score 41.2;  DB 3;  Length 1308;
  Best Local Similarity   47.6%;  Pred. No. 0.63;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

Qy    464 catcaaggctgccgtggaggttgccaaccccggctccttcatctacgtcttctcggatgc 523
          |||| ||     |  | || |  ||| |   |    | ||||  |   | |   | | ||
Db    800 CATCCAGCACTGCAAGAAGCTCTCCAGCTGGGTGCTCCTCATGAAGTACCTGGGGAACGC 859

Qy    524 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 583
          |   ||||    || ||    | |  | |     || |||| |||| ||    ||| | |
Db    860 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 919

Qy    584 gcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctggctacctggc 643
          ||| |   || ||  |  |     |||   ||  ||| |   |  | || ||  ||
Db    920 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 979

Qy    644 ttttgaggagatcgcctccaccagttctggccaagtgttccagctggacaagcagcaggt 703
            ||  || |  | ||  ||  |  | ||    |  |  ||||| | ||| |    |
Db    980 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 1039

Qy    704 gtcggaggtgttaa 717
            || |||| || |
Db   1040 CACGAAGGTCTTCA 1053


RESULT   7
US-08-864-038A-1
; Sequence 1, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBOD
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
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;      APPLICATION NUMBER:  US/08/864,038A
;      FILING DATE:  May 28, 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 8-184459
;      FILING DATE:  15-July-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  C. Bruce Hamburg
;      REGISTRATION NUMBER:  22,389
;      REFERENCE/DOCKET NUMBER:  F-5610
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)986-2340
;      TELEFAX:  (212)953-7733
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2214
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  Pinctada fucata
;      CELL TYPE:  mantle epithelial cell
US-08-864-038A-1


  Query Match             3.9%;  Score 40.2;  DB 3;  Length 2214;
  Best Local Similarity   51.4%;  Pred. No. 1.2;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy    553 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 612
          |||  | || ||| |||| |||| || || |||||||||| ||| | |    | | ||
Db    717 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 776

Qy    613 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 672
           |   ||   | |     | | ||    ||| |  ||||   | |   || |      |
Db    777 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 836

Qy    673 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 732
            | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db    837 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 896

Qy    733 c 733
          |
Db    897 C 897


RESULT   8
US-08-864-038A-2
; Sequence 2, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBODY
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/864,038A
;      FILING DATE:  May 28, 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 8-184459
;      FILING DATE:  15-July-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  C. Bruce Hamburg
;      REGISTRATION NUMBER:  22,389
;      REFERENCE/DOCKET NUMBER:  F-5610
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)986-2340
;      TELEFAX:  (212)953-7733
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  3331
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA to mRNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Pinctada fucata
;      CELL TYPE:  mantle epithelial cell
;    FEATURE:  mRNA
;      LOCATION:  from 1 to 3331
;      IDENTIFICATION METHOD:  E (by experiment)
US-08-864-038A-2


  Query Match             3.9%;  Score 40.2;  DB 3;  Length 3331;
  Best Local Similarity   51.4%;  Pred. No. 1.3;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy    553 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 612
          |||  | || ||| |||| |||| || || |||||||||| ||| | |    | | ||
Db    766 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 825

Qy    613 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 672
           |   ||   | |     | | ||    ||| |  ||||   | |   || |      |
Db    826 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 885

Qy    673 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 732
            | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db    886 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 945

Qy    733 c 733
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Db    946 C 946


RESULT   9
US-08-864-038A-4
; Sequence 4, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBOD
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/864,038A
;      FILING DATE:  May 28, 1997
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;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 8-184459
;      FILING DATE:  15-July-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  C. Bruce Hamburg
;      REGISTRATION NUMBER:  22,389
;      REFERENCE/DOCKET NUMBER:  F-5610
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)986-2340
;      TELEFAX:  (212)953-7733
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  3331
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA to mRNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Pinctada fucata
;      CELL TYPE:  mantle epithelial cell
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  from 50 to 2263
;      IDENTIFICATION METHOD:  P (by similarity to some other pattern)
US-08-864-038A-4


  Query Match             3.9%;  Score 40.2;  DB 3;  Length 3331;
  Best Local Similarity   51.4%;  Pred. No. 1.3;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy     553 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 612
           ||| | || ||| |||| |||| || || |||||||||| ||| | |    | | ||
Db     766 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 825

Qy     613 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 672
             |   ||   | |      | | ||  ||| |  ||||   | |   || |       |
Db     826 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 885

Qy     673 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 732
             | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db     886 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 945

Qy     733 c 733
           |
Db     946 C 946


RESULT  10
US-08-073-384C-7
; Sequence 7, Application US/08073384C
; Patent No. 5541311
;  GENERAL INFORMATION:
;    APPLICANT:  Dahlberg, James E.
;    APPLICANT:  Lyamichev, Victor I.
;    APPLICANT:  Brow, Mary Ann D.
;    TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;    TITLE OF INVENTION:  POLYMERASE
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 Montgomery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/073,384C
;      FILING DATE:  04-JUN-1993
;      CLASSIFICATION:  536
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Carroll, Peter G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-00613
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/705-8410
;      TELEFAX:  415/397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-073-384C-7


  Query Match             3.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.7;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy     179 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 238
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     239 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 298
             |||||||||  ||| ||  ||    ||  || || |       ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     299 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 358
             |    |  |   |  | | | | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
           | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  11
US-08-254-359A-7
; Sequence 7, Application US/08254359A
; Patent No. 5614402
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    TITLE OF INVENTION:  5' NUCLEASES DERIVED FROM THERMOSTABLE
;    TITLE OF INVENTION:  DNA POLYMERASE
;    NUMBER OF SEQUENCES:  40
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  UNITED STATES OF AMERICA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/254,359A
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  06-JUN-1993
;    PRIOR APPLICATION DATA:
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;       APPLICATION NUMBER:  US 07/986,330
;       FILING DATE:  07-DEC-1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  CARROLL, PETER G.
;       REGISTRATION NUMBER:  32,837
;       REFERENCE/DOCKET NUMBER:  FORS-01000
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (415) 705-8410]
;       TELEFAX:  (415) 397-8338
;   INFORMATION FOR SEQ ID NO:  7:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  2502 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA (genomic)
US-08-254-359A-7


  Query Match             3.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.7;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy     179 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 238
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     239 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 298
           |||||||||| ||| ||  ||    ||  || || |        ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     299 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 358
           |    |  |   |  | | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  12
US-08-483-043-7
; Sequence 7, Application US/08483043
; Patent No. 5691142
;  GENERAL INFORMATION:
;    APPLICANT:  Dahlberg, James E.
;    APPLICANT:  Lyamichev, Victor I.
;    APPLICANT:  Brow, Mary Ann D.
;    TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;    TITLE OF INVENTION:  POLYMERASE
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 Montgomery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/483,043
;      FILING DATE:  06-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Carroll, Peter G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-00613
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/705-8410
;      TELEFAX:  415/397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-483-043-7


  Query Match             3.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.7;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy     179 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 238
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     239 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 298
           |||||||||| ||| ||  ||    ||  || || |        ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     299 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 358
           |    |  |   |  | | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  13
US-08-481-238-7
; Sequence 7, Application US/08481238
; Patent No. 5795763
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;    TITLE OF INVENTION:  POLYMERASE
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  USA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/481,238
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  CARROLL, PETER G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-01798
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
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;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-481-238-7


  Query Match             3.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.7;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

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Qy    239 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 298
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Qy    299 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 358
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Db   1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy    359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
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Db   1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  14
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; Sequence 7, Application US/08471066B
; Patent No. 5837450
;  GENERAL INFORMATION:
;    APPLICANT:  Dahlberg, James E.
;    APPLICANT:  Lyamichev, Victor I.
;    APPLICANT:  Brow, Mary Ann D.
;    TITLE OF INVENTION:  5' Nucleases Derived From Thermostable
;    TITLE OF INVENTION:  DNA Polyermase
;    NUMBER OF SEQUENCES:  40
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Medlen & Carroll, LLP
;      STREET:  220 Montgomery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/471,066B
;      FILING DATE:  06-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/254,359
;      FILING DATE:  06-JUN-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ingolia, Diane E.
;      REGISTRATION NUMBER:  40,027
;      REFERENCE/DOCKET NUMBER:  FORS-01800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-471-066B-7


  Query Match             3.8%;  Score 39.6;  DB 2;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.7;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy    179 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 238
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Db   1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy    359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
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Db   1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  15
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; Sequence 7, Application US/08484956
; Patent No. 5843654
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    APPLICANT:  OLDENBURG, MARY C.
;    APPLICANT:  HEISLER, LAURA
;    TITLE OF INVENTION:  DETECTION OF p53 MUTATIONS
;    NUMBER OF SEQUENCES:  114
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  UNITED STATES OF AMERICA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/484,956
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/402,601
;      FILING DATE:  09-MAR-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/337,164
;      FILING DATE:  09-NOV-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/254,359
;      FILING DATE:  06-JUN-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
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; NAME: CARRPOLL], PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01801
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2502 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-484-956-7

Query Match 3.8%; Score 39.6; DB 2; Length 2502;
Best Local Similarity 47.4%; Pred. No. 1.7;
Matches 108; Conservative 0; Mismatches 120; Indels 0; Gaps 0;

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Qy    239 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 298
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Db    948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy    299 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 358
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Db   1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy    359 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 406
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Db   1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115
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Job time: 713 sec

GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: September 5, 2002, 13:13:05 ; Search time 94.24 Seconds
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Title: US-09-665-728-2_COPY_96_920
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Scoring table: IDENTITY_NUC
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Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
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	2	50.4	6.1	2338	2	US-08-317-844B-1	Sequence 1, Appli
	3	41.2	5.0	1185	3	US-09-023-339-3	Sequence 3, Appli
	4	41.2	5.0	1260	3	US-09-023-173-5	Sequence 5, Appli
	5	41.2	5.0	1308	3	US-09-023-173-10	Sequence 10, Appl
	6	41.2	5.0	1308	3	US-09-023-339-6	Sequence 6, Appli
	7	40.2	4.9	2214	3	US-08-864-038A-1	Sequence 1, Appli
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	9	40.2	4.9	3331	3	US-08-864-038A-4	Sequence 4, Appli
	10	39.6	4.8	2502	1	US-08-073-384C-7	Sequence 7, Appli
	11	39.6	4.8	2502	1	US-08-254-359A-7	Sequence 7, Appli
	12	39.6	4.8	2502	1	US-08-483-043-7	Sequence 7, Appli
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	17	39.6	4.8	2502	2	US-08-599-491-7	Sequence 7, Appli
	18	39.6	4.8	2502	2	US-08-756-386-7	Sequence 7, Appli
	19	39.6	4.8	2502	2	US-08-823-516-7	Sequence 7, Appli
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	21	39.6	4.8	2502	3	US-08-759-038-7	Sequence 7, Appli
	22	39.6	4.8	2502	3	US-08-758-314-7	Sequence 7, Appli
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	24	38.8	4.7	1929	4	US-09-380-420C-1	Sequence 1, Appli
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	26	38.2	4.6	1995	1	US-08-425-069-3	Sequence 3, Appli
	27	38.2	4.6	1995	2	US-08-317-844B-3	Sequence 3, Appli
	28	37.4	4.5	6085	4	US-09-029-603-4	Sequence 4, Appli
	29	37	4.5	2000	4	US-09-329-350-34	Sequence 34, Appl
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c	40	36	4.4	756	1	US-08-642-255-50	Sequence 50, Appl
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	42	36	4.4	2040	3	US-08-604-789B-12	Sequence 12, Appl
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	44	36	4.4	2040	4	US-09-312-721A-12	Sequence 12, Appl
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ALIGNMENTS

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US-08-425-069-1
; Sequence 1, Application US/08425069
; Patent No. 5728810
;  GENERAL INFORMATION:
;    APPLICANT:  Lewis, Randolph V.
;    APPLICANT:  Xu, Ming
;    APPLICANT:  Hinman, Michael B.
;    TITLE OF INVENTION:  ISOLATED DNA CODING FOR SPIDER SILK
;    TITLE OF INVENTION:  PROTEIN, A REPLICABLE VECTOR AND A TRANSFORMED CELL
;    TITLE OF INVENTION:  CONTAINING THE ISOLATED DNA, AND PRODUCTS THEREOF
;    NUMBER OF SEQUENCES:  69
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Birch, Stewart, Kolasch & Birch
;      STREET:  301 No. 5728810th Washington Street
;      CITY:  Falls Church
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22046
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/425,069
;      FILING DATE:  19-APR-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Murphy Jr., Gerald M
;      REGISTRATION NUMBER:  28,977
;      REFERENCE/DOCKET NUMBER:  1447-106P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 205-8000
;      TELEFAX:  (703) 205-8050
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2338 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Nephilia clavipes
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..2154
;      OTHER INFORMATION:  /product= "Nephila clavipes
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;       OTHER INFORMATION:  dragline silk protein"
;     PUBLICATION INFORMATION:
;       AUTHORS:  Xu, Ming
;       AUTHORS:  Lewis, Randolph V.
;       TITLE:  Structure of a protein superfiber:  Spider
;       TITLE:  drafline silk
;       JOURNAL:  Proc. Natl. Acad. Sci. U.S.A.
;       VOLUME:  87
;       PAGES:  7120-7124
;       DATE:  Sept.-1990
;       RELEVANT RESIDUES IN SEQ ID NO:  1: FROM 1 TO 2338
US-08-425-069-1


  Query Match             6.1%;  Score 50.4;  DB 1;  Length 2338;
  Best Local Similarity   49.3%;  Pred. No. 0.004;
  Matches  132;  Conservative    0;  Mismatches  136;  Indels    0;  Gaps    0;

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Db     699 ACAAGGTGCTGGACAAGGAGCTGGAGCA 726


RESULT   2
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; Sequence 1, Application US/08317844B
; Patent No. 5989894
;  GENERAL INFORMATION:
;    APPLICANT:  Lewis, Randolph V.
;    APPLICANT:  Xu, Ming
;    APPLICANT:  Hinman, Michael B.
;    TITLE OF INVENTION:  ISOLATED DNA CODING FOR SPIDER SILK
;    TITLE OF INVENTION:  PROTEIN, A REPLICABLE VECTOR AND A TRANSFORMED CELL
;    TITLE OF INVENTION:  CONTAINING THE ISOLATED DNA, AND PRODUCTS THEREOF
;    NUMBER OF SEQUENCES:  62
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Birch, Stewart, Kolasch & Birch
;      STREET:  301 No. 5989894th Washington Street
;      CITY:  Falls Church
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22046
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/317,844B
;      FILING DATE:  04-OCT-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Murphy Jr., Gerald M
;      REGISTRATION NUMBER:  28,977
;      REFERENCE/DOCKET NUMBER:  1447-105P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 241-1300
;      TELEFAX:  (703) 241-2848
;      TELEX:  248345
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2338 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Nephilia clavipes
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..2154
;      OTHER INFORMATION:  /product= "Nephila clavipes
;      OTHER INFORMATION:  dragline silk protein"
;    PUBLICATION INFORMATION:
;      AUTHORS:  Xu, Ming
;      AUTHORS:  Lewis, Randolph V.
;      TITLE:  Structure of a protein superfiber:  Spider
;      TITLE:  drafline silk
;      JOURNAL:  Proc. Natl. Acad. Sci. U.S.A.
;      VOLUME:  87
;      PAGES:  7120-7124
;      DATE:  Sept.-1990
;      RELEVANT RESIDUES IN SEQ ID NO:  1: FROM 1 TO 2338
US-08-317-844B-1


  Query Match             6.1%;  Score 50.4;  DB 2;  Length 2338;
  Best Local Similarity   49.3%;  Pred. No. 0.004;
  Matches  132;  Conservative    0;  Mismatches  136;  Indels    0;  Gaps    0;

Qy     419 tctcggatgcccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagc 478
           ||| ||| |||   |   ||||| |     |  ||   ||     ||||| | | |||||
Db     459 TCTTGGAAGCCAAGGTGCAGGACGAGGTGGATTAGGTGGACAAGGTGCAGGTGCAGCAGC 518

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Db     639 AGGTGCAGGTGCAGCAGCAGCAGCAGCTGGAGGTGCCGGACAAGGAGGACTAGGTGG 698

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; Sequence 3, Application US/09023339
; Patent No. 6127145
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of `1-Antitrypsin
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  P.O. Box 60850
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
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;       MEDIUM TYPE:  Diskette
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  DOS
;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/023,339
;       FILING DATE:  13-FEB-1998
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  60/037,991
;       FILING DATE:  13-FEB-1997
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Petithory, Joanne R
;       REGISTRATION NUMBER:  P42,995
;       REFERENCE/DOCKET NUMBER:  0665-0003.30
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650-324-0880
;       TELEFAX:  650-324-0960
;   INFORMATION FOR SEQ ID NO:  3:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1185 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     IMMEDIATE SOURCE:
;       CLONE:  codon-optimized AAT coding sequence
US-09-023-339-3


  Query Match             5.0%;  Score 41.2;  DB 3;  Length 1185;
  Best Local Similarity   47.6%;  Pred. No. 0.47;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

Qy    369 catcaaggctgccgtggaggttgccaaccccggctccttcatctacgtcttctcggatgc 428
          |||| ||      |  | || |  ||| |    |     | ||||  |   | |    | | ||
Db    684 CATCCAGCACTGCAAGAAGCTCTCCAGCTGGGTGCTCCTCATGAAGTACCTGGGGAACGC 743

Qy    429 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 488
          |   ||||    || ||    | |  | |     || |||| |||| ||    ||| | |
Db    744 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 803

Qy    489 gcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctggctacctggc 548
          ||| |   || ||  |  |      |||   ||  ||| |   |  | || ||  ||
Db    804 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 863

Qy    549 ttttgaggagatcgcctccaccagttctggccaagtgttccagctggacaagcagcaggt 608
            ||  || |  | ||  ||  |  | ||    |  |  ||||| | ||| |    |
Db    864 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 923

Qy    609 gtcggaggtgttaa 622
            || |||| || |
Db    924 CACGAAGGTCTTCA 937


RESULT   4
US-09-023-173-5
; Sequence 5, Application US/09023173
; Patent No. 6066781
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of Mature Proteins
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Ave., Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/023,173
;      FILING DATE:  13-FEB-1998
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/038,168
;      FILING DATE:  13-FEB-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Petithory, Joanne R
;      REGISTRATION NUMBER:  P42995
;      REFERENCE/DOCKET NUMBER:  0665-0007.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-324-0880
;      TELEFAX:  650-324-0960
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1260 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      CLONE:  codon-optimized RAmy3D signal-mature AAT
US-09-023-173-5


  Query Match             5.0%;  Score 41.2;  DB 3;  Length 1260;
  Best Local Similarity   47.6%;  Pred. No. 0.48;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

Qy    369 catcaaggctgccgtggaggttgccaaccccggctccttcatctacgtcttctcggatgc 428
          |||| ||      |  | || |  ||| |    |     | ||||  |   | |    | | ||
Db    759 CATCCAGCACTGCAAGAAGCTCTCCAGCTGGGTGCTCCTCATGAAGTACCTGGGGAACGC 818

Qy    429 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 488
          |   ||||    || ||    | |  | |     || |||| |||| ||    ||| | |
Db    819 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 878

Qy    489 gcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctggctacctggc 548
          ||| |   || ||  |  |      |||   ||  ||| |   |  | || ||  ||
Db    879 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 938

Qy    549 ttttgaggagatcgcctccaccagttctggccaagtgttccagctggacaagcagcaggt 608
            ||  || |  | ||  ||  |  | ||    |  |  ||||| | ||| |    |
Db    939 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 998

Qy    609 gtcggaggtgttaa 622
            || |||| || |
Db    999 CACGAAGGTCTTCA 1012


RESULT   5
US-09-023-173-10
; Sequence 10, Application US/09023173
; Patent No. 6066781
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of Mature Proteins
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Ave., Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
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;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/023,173
;      FILING DATE:  13-FEB-1998
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/038,168
;      FILING DATE:  13-FEB-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Petithory, Joanne R
;      REGISTRATION NUMBER:  P42995
;      REFERENCE/DOCKET NUMBER:  0665-0007.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-324-0880
;      TELEFAX:  650-324-0960
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1308 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-09-023-173-10


  Query Match             5.0%;  Score 41.2;  DB 3;  Length 1308;
  Best Local Similarity   47.6%;  Pred. No. 0.48;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

Qy    369 catcaaggctgccgtggaggttgccaaccccggctccttcatctacgtcttctcggatgc 428
          |||| ||      |  | || |  ||| |    |    | ||||  |   | |   | | ||
Db    800 CATCCAGCACTGCAAGAAGCTCTCCAGCTGGGTGCTCCTCATGAAGTACCTGGGGAACGC 859

Qy    429 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 488
          |   ||||    || ||    | |  | |      || |||| |||| ||    ||| | |
Db    860 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 919

Qy    489 gcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctggctacctggc 548
          ||| |   || ||  |  |     |||   ||  ||| |   |  | || ||  ||
Db    920 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 979

Qy    549 ttttgaggagatcgcctccaccagttctggccaagtgttccagctggacaagcagcaggt 608
              ||  || |  | ||  ||  |  | ||    |  |  ||||| | ||| |    |
Db    980 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 1039

Qy    609 gtcggaggtgttaa 622
            || |||| || |
Db   1040 CACGAAGGTCTTCA 1053


RESULT   6
US-09-023-339-6
; Sequence 6, Application US/09023339
; Patent No. 6127145
;  GENERAL INFORMATION:
;    APPLICANT:  Sutliff, Thomas D.
;    APPLICANT:  Rodriguez, Raymond L.
;    TITLE OF INVENTION:  Production of '1-Antitrypsin
;    TITLE OF INVENTION:  in Plants
;    NUMBER OF SEQUENCES:  22
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  P.O. Box 60850
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/023,339
;      FILING DATE:  13-FEB-1998
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/037,991
;      FILING DATE:  13-FEB-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Petithory, Joanne R
;      REGISTRATION NUMBER:  P42,995
;      REFERENCE/DOCKET NUMBER:  0665-0003.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-324-0880
;      TELEFAX:  650-324-0960
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1308 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      CLONE:  codon-optimized No. 6127145I/XhoI fragment encoding RAmy3D
;      CLONE:  signal peptide-AAT fusion protein
US-09-023-339-6


  Query Match             5.0%;  Score 41.2;  DB 3;  Length 1308;
  Best Local Similarity   47.6%;  Pred. No. 0.48;
  Matches  121;  Conservative    0;  Mismatches  133;  Indels    0;  Gaps    0;

Qy    369 catcaaggctgccgtggaggttgccaaccccggctccttcatctacgtcttctcggatgc 428
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Db    800 CATCCAGCACTGCAAGAAGCTCTCCAGCTGGGTGCTCCTCATGAAGTACCTGGGGAACGC 859

Qy    429 ccgtgccaaggactaccacaagaagaatgagctcctgcagctcctgcagctgaagcagtc 488
          |   ||||    || ||    | |  | |      || |||| |||| ||    ||| | |
Db    860 CACCGCCATCTTCTTCCTGCCGGACGAGGGCAAGCTCCAGCACCTGGAGAACGAGCTGAC 919

Qy    489 gcaggtggtcttcgtgctgactggggactgcggtgaccgcacccaccctggctacctggc 548
          ||| |   || ||  |  |     |||   ||  ||| |   |  | || ||  ||
Db    920 GCACGACATCATCACGAAGTTCCTGGAGAACGAGGACAGGCGCTCCGCTAGCCTCCACCT 979

Qy    549 ttttgaggagatcgcctccaccagttctggccaagtgttccagctggacaagcagcaggt 608
              ||  || |  | ||  ||  |  | ||    |  |  ||||| | ||| |    |
Db    980 CCCGAAGCTGAGCATCACCGGCACGTACGACCTGAAGAGCGTGCTGGGCCAGCTGGGCAT 1039

Qy    609 gtcggaggtgttaa 622
            || |||| || |
Db   1040 CACGAAGGTCTTCA 1053


RESULT   7
US-08-864-038A-1
; Sequence 1, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBOD
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
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;       APPLICATION NUMBER:  US/08/864,038A
;       FILING DATE:  May 28, 1997
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 8-184459
;       FILING DATE:  15-July-1996
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  C. Bruce Hamburg
;       REGISTRATION NUMBER:  22,389
;       REFERENCE/DOCKET NUMBER:  F-5610
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212)986-2340
;       TELEFAX:  (212)953-7733
;   INFORMATION FOR SEQ ID NO:  1:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  2214
;       TYPE:  nucleic acid
;       STRANDEDNESS:  double
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  Pinctada fucata
;       CELL TYPE:  mantle epithelial cell
US-08-864-038A-1


  Query Match             4.9%;  Score 40.2;  DB 3;  Length 2214;
  Best Local Similarity   51.4%;  Pred. No. 0.92;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy    458 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 517
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Db    717 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 776

Qy    518 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 577
            |   ||   | |     | | ||    ||| |  ||||   | |   || |      |
Db    777 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 836

Qy    578 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 637
            | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db    837 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 896

Qy    638 c 638
          |
Db    897 C 897


RESULT   8
US-08-864-038A-2
; Sequence 2, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBODY
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/864,038A
;      FILING DATE:  May 28, 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 8-184459
;      FILING DATE:  15-July-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  C. Bruce Hamburg
;      REGISTRATION NUMBER:  22,389
;      REFERENCE/DOCKET NUMBER:  F-5610
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)986-2340
;      TELEFAX:  (212)953-7733
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  3331
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA to mRNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Pinctada fucata
;      CELL TYPE:  mantle epithelial cell
;    FEATURE:  mRNA
;      LOCATION:  from 1 to 3331
;      IDENTIFICATION METHOD:  E (by experiment)
US-08-864-038A-2


  Query Match             4.9%;  Score 40.2;  DB 3;  Length 3331;
  Best Local Similarity   51.4%;  Pred. No. 1;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy    458 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 517
          |||  | || ||| |||| |||| || || |||||||||| ||| | |    | | ||
Db    766 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 825

Qy    518 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 577
            |   ||   | |     | | ||    ||| |  ||||   | |   || |      |
Db    826 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 885

Qy    578 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 637
            | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db    886 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 945

Qy    638 c 638
          |
Db    946 C 946


RESULT   9
US-08-864-038A-4
; Sequence 4, Application US/08864038A
; Patent No. 6001592
;  GENERAL INFORMATION:
;    APPLICANT:  Kunio NAKASHIMA et al.
;    TITLE OF INVENTION:  NOVEL POLYPEPTIDE GENE cDNA, VECTOR
;    TITLE OF INVENTION:  CONTAINING SAID cDNA, HOST CELLS TRANSFORMED WITH SAID
;    TITLE OF INVENTION:  VECTOR, POLYPEPTIDE PRODUCED THEREBY, METHOD OF PRODUCING
;    TITLE OF INVENTION:  SAID POLYPEPTIDE, DNA ENCODING SAID POLYPEPTIDE AND ANTIBOD
;    TITLE OF INVENTION:  TO SAID POLYPEPTIDE
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  812-5 Hirano
;      STREET:  Isshinden
;      CITY:  Tsu-city
;      STATE:  Mie-prefecture
;      COUNTRY:  JAPAN
;      ZIP:  514-01
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 1.44 MB storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Microsoft Windows 95
;      SOFTWARE:  Word Perfect 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/864,038A
;      FILING DATE:  May 28, 1997
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;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 8-184459
;      FILING DATE:  15-July-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  C. Bruce Hamburg
;      REGISTRATION NUMBER:  22,389
;      REFERENCE/DOCKET NUMBER:  F-5610
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212)986-2340
;      TELEFAX:  (212)953-7733
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  3331
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA to mRNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Pinctada fucata
;      CELL TYPE:  mantle epithelial cell
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  from 50 to 2263
;      IDENTIFICATION METHOD:  P (by similarity to some other pattern)
US-08-864-038A-4


  Query Match             4.9%;  Score 40.2;  DB 3;  Length 3331;
  Best Local Similarity   51.4%;  Pred. No. 1;
  Matches   93;  Conservative    0;  Mismatches   88;  Indels    0;  Gaps    0;

Qy     458 agctcctgcagctcctgcagctgaagcagtcgcaggtggtcttcgtgctgactggggact 517
           |||  | || ||| |||| |||| || || ||||||||| ||| | |    | | ||
Db     766 AGCCGCAGCCGCTGCTGCCGCTGCAGGAGGCGCAGGTGGACTTGGAGGACTCGGTGGCGG 825

Qy     518 gcggtgaccgcacccaccctggctacctggcttttgaggagatcgcctccaccagttctg 577
             |   ||   | |     | | ||    ||| |  |||| |  | |  || |       |
Db     826 ACTTGGAGGACTCGGTGGCGGACTTGGAGGCCTCGGAGGTCTTGGTGGCCTCGGAGGATA 885

Qy     578 gccaagtgttccagctggacaagcagcaggtgtcggaggtgttaaagtgggtggagtccg 637
           | |   | | ||||     || || | || ||  | || |   |  |||||||  |
Db     886 TGGAGGATCTGCTGCTGCCGCTGCTGCTGCTGCCGCCGCTGCTGCCGGAGGTGGAGGACT 945

Qy     638 c 638
           |
Db     946 C 946


RESULT  10
US-08-073-384C-7
; Sequence 7, Application US/08073384C
; Patent No. 5541311
;  GENERAL INFORMATION:
;   . APPLICANT:  Dahlberg, James E.
;     APPLICANT:  Lyamichev, Victor I.
;     APPLICANT:  Brow, Mary Ann D.
;     TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;     TITLE OF INVENTION:  POLYMERASE
;     NUMBER OF SEQUENCES:  29
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;       STREET:  220 Montgomery Street, Suite 2200
;       CITY:  San Francisco
;       STATE:  California
;       COUNTRY:  United States of America
;       ZIP:  94104
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/073,384C
;       FILING DATE:  04-JUN-1993
;       CLASSIFICATION:  536
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/986,330
;       FILING DATE:  07-DEC-1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Carroll, Peter G.
;       REGISTRATION NUMBER:  32,837
;       REFERENCE/DOCKET NUMBER:  FORS-00613
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  415/705-8410
;       TELEFAX:  415/397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;       LENGTH:  2502 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-073-384C-7


  Query Match             4.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
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Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
             |||||||||| ||| ||  ||    ||  || || |       ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
             |    |  |   |   | | | | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  11
US-08-254-359A-7
; Sequence 7, Application US/08254359A
; Patent No. 5614402
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    TITLE OF INVENTION:  5' NUCLEASES DERIVED FROM THERMOSTABLE
;    TITLE OF INVENTION:  DNA POLYMERASE
;    NUMBER OF SEQUENCES:  40
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  UNITED STATES OF AMERICA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/254,359A
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  06-JUN-1993
;    PRIOR APPLICATION DATA:
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;       APPLICATION NUMBER:  US 07/986,330
;       FILING DATE:  07-DEC-1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  CARROLL, PETER G.
;       REGISTRATION NUMBER:  32,837
;       REFERENCE/DOCKET NUMBER:  FORS-01000
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (415) 705-8410]
;       TELEFAX:  (415) 397-8338
;   INFORMATION FOR SEQ ID NO:  7:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  2502 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA (genomic)
US-08-254-359A-7


  Query Match             4.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
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Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
           |||||||| ||| ||  ||    ||  || ||| |        ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
           |    |  |   |  | | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  12
US-08-483-043-7
; Sequence 7, Application US/08483043
; Patent No. 5691142
;  GENERAL INFORMATION:
;    APPLICANT:  Dahlberg, James E.
;    APPLICANT:  Lyamichev, Victor I.
;    APPLICANT:  Brow, Mary Ann D.
;    TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;    TITLE OF INVENTION:  POLYMERASE
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 Montgomery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/483,043
;      FILING DATE:  06-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Carroll, Peter G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-00613
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/705-8410
;      TELEFAX:  415/397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-483-043-7


  Query Match             4.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
           |||||||| ||| ||  ||    ||  || ||| |        ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
           |    |  |   |  | | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  13
US-08-481-238-7
; Sequence 7, Application US/08481238
; Patent No. 5795763
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    TITLE OF INVENTION:  SYNTHESIS-DEFICIENT THERMOSTABLE DNA
;    TITLE OF INVENTION:  POLYMERASE
;    NUMBER OF SEQUENCES:  29
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  USA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/481,238
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  CARROLL, PETER G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-01798
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
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;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-481-238-7


  Query Match             4.8%;  Score 39.6;  DB 1;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
           |||||||||| ||| ||  ||    ||  || || |       ||    |  | ||     -
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
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Db    1008 ACCAGACCCCTTTANGGGCCTNAGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  14
US-08-471-066B-7
; Sequence 7, Application US/08471066B
; Patent No. 5837450
;  GENERAL INFORMATION:
;    APPLICANT:  Dahlberg, James E.
;    APPLICANT:  Lyamichev, Victor I.
;    APPLICANT:  Brow, Mary Ann D.
;    TITLE OF INVENTION:  5' Nucleases Derived From Thermostable
;    TITLE OF INVENTION:  DNA Polyermase
;    NUMBER OF SEQUENCES:  40
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Medlen & Carroll, LLP
;      STREET:  220 Montgomery Street, Suite 2200
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States of America
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/471,066B
;      FILING DATE:  06-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/254,359
;      FILING DATE:  06-JUN-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ingolia, Diane E.
;      REGISTRATION NUMBER:  40,027
;      REFERENCE/DOCKET NUMBER:  FORS-01800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-471-066B-7


  Query Match             4.8%;  Score 39.6;  DB 2;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
           |||||||||| ||| ||  ||    ||  || || |       ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
           |    |  |   |  | | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


RESULT  15
US-08-484-956-7
; Sequence 7, Application US/08484956
; Patent No. 5843654
;  GENERAL INFORMATION:
;    APPLICANT:  DAHLBERG, JAMES E.
;    APPLICANT:  LYAMICHEV, VICTOR I.
;    APPLICANT:  BROW, MARY ANN D.
;    APPLICANT:  OLDENBURG, MARY C.
;    APPLICANT:  HEISLER, LAURA
;    TITLE OF INVENTION:  DETECTION OF p53 MUTATIONS
;    NUMBER OF SEQUENCES:  114
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HAVERSTOCK, MEDLEN & CARROLL
;      STREET:  220 MONTGOMERY STREET, SUITE 2200
;      CITY:  SAN FRANCISCO
;      STATE:  CALIFORNIA
;      COUNTRY:  UNITED STATES OF AMERICA
;      ZIP:  94104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/484,956
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/402,601
;      FILING DATE:  09-MAR-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/337,164
;      FILING DATE:  09-NOV-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/254,359
;      FILING DATE:  06-JUN-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/073,384
;      FILING DATE:  04-JUN-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/986,330
;      FILING DATE:  07-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
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```
;      NAME:  CARRPOLL ], PETER G.
;      REGISTRATION NUMBER:  32,837
;      REFERENCE/DOCKET NUMBER:  FORS-01801
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 705-8410
;      TELEFAX:  (415) 397-8338
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-484-956-7


  Query Match             4.8%;  Score 39.6;  DB 2;  Length 2502;
  Best Local Similarity   47.4%;  Pred. No. 1.3;
  Matches  108;  Conservative    0;  Mismatches  120;  Indels    0;  Gaps    0;

Qy      84 gaagacgctgtcccccgccacaggagacgccaccctggccttcgtcttcgatgtcaccgg 143
           | || | |  |  ||| |  | | ||  |||  | ||| ||| ||| |      | |||
Db     888 GGAGGCCCCCTGGCCCCCGCCGGAAGGGGCCTTCGTGGGCTTTGTCCTTTCCCGCCCCGA 947

Qy     144 ctccatgtgggacgatctgatgcaggtgatcgacggcgcctcacgcattctggagcgcag 203
           |||||||||| ||| ||  ||    ||  || || |       ||    |  | ||
Db     948 GCCCATGTGGGCCGAGCTTCTGGCCCTGGCCGCCGCCAGGGAGGGCCGGGTCCACCGGGC 1007

Qy     204 tctgagcagccgcagccgggtcatcgccaactatgcgctggtgcctttccacgacccaga 263
           |    |  |   |   |  | |  | |    | | | ||  |    ||| || |   ||
Db    1008 ACCAGACCCCTTTANGGGCCTNAGGGACCTNAAGGAGGTGCGGGGNCTCCTCGCCAAGGA 1067

Qy     264 cattggcccagtgaccctcacggcggacccagtggtgtttcagagaga 311
           | | | |    || |||| | || || ||  |   |  | |   | ||
Db    1068 CCTGGCCGTTTTGGCCCTGAGGGAGGGCCTNGACCTCNTGCCCGGGGA 1115


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Job time: 723 sec
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